*First Published February* 1951
*Revised and Enlarged June* 1954
*Third Edition September* 1956

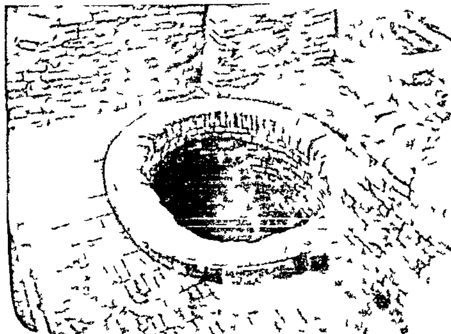
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# 5000 YEARS OF INDIAN ARCHITECTURE



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1
*Drainage system at Mohenjo daro*



*A  ell at Mohenjo daro*

# 5000 Years of Indian Architecture

PERHAPS no branch of human culture reflects with greater exactitude the progress or decadence of man than architecture In the progress of architecture from the most primitive types of human habitation to magnificent temples and palaces we can discover the ceaseless effort of man to express his social and religious environment and his attitude towards life In the development of architecture we can also detect the aesthetic taste which actuated man to combine beauty with utility The progress of Indian architecture from the primitive to the sophisticated was no exception to this historical process

The earliest phase of Indian architecture may be seen from the remains of the ancient cities of the *Indus Valley culture datable to* c 3000 B C From the excavated remains at Mohenjo daro in Sind and Harappa in the Punjab it is evident that the Indian cities at that early period were scientifically laid There were broad roads and smaller lanes with shops and booths The houses were probably of one storey or more The roofs were of stamped clay Practically every house had a bath room which was always placed on the street side of the building for the convenient disposal of water There was adequate arrangement for drainage (Fig 1) A brick lined channel flowed down every street and into this main drain ran smaller tributary drains from the houses on either side Another important feature of the drainage system was the provision of the large brick culverts with corbelled roofs built on the outskirts of the city to carry away storm water The houses were also provided with brick lined wells (Fig 2)

3 & 4 *Remains of a structure with 12 parallel walls Harappa*



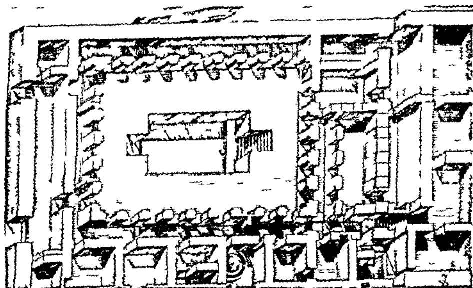
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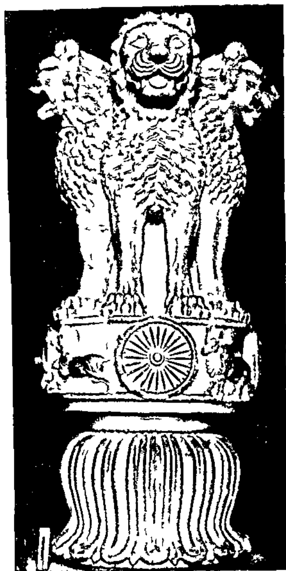
At Harappa the remains of one of the structures has twelve parallel walls We are unable to determine the exact significance of this structure but it might have been a gigantic storehouse (Figs 3 & 4) At Mohenjo daro some buildings have cup like depressions at street corner These depressions probably served as receptacles for large jars

One of the most important constructions at Mohenjo-daro is the large bath built entirely of burnt bricks which could be entered at either end by mean of a staircase (Fig 5) The broad walk at the top of the bath rested on cells filled with clay There were walls with openings which provided access to a cloistered walk running round the bath The eight bathrooms to the north of the bath were provided with stairways probably leading to an upper storey The exact significance of this great bath and maller baths has not yet been discovered but it is probable that bathing was a ritual with the people of Mohenjo-daro

The history of Indian architecture between the Indus Valley period which came to an end some time in the 2nd millennium B C and the 4th century B C is very meagre We have to depend entirely on literature to fill up this gap From the Vedic evidence it seems possible that the idea of the fortified town was adopted by the

5 *Isometric protection of the Great Bath Mohenjo daro*





*6 Lion Capital Sarnath*

Vedic Aryans from their Dasa enemies though so far it has not been possible to connect these Dasas with the Indus Valley people

The Vedic house was not a very elaborate affair and the people lived mostly in thatched houses with several rooms The house was often provided with a central hall and several other rooms which served for storing and living pur poses

In the epics and Buddhist litera ture references are made to well built cities and sumptuous palaces These cities and palaces seem to have followed the same plan as that of the city of Pataliputra which according to Megasthenes (4th century B C) occupied a narrow parallelogram and was provided with stupendous palisades with loopholes for archers There was a deep moat around it The rampart had as many as sixty four gates The royal palace was a spacious building the main part of which consisted of a series of hypostyle halls

The architecture of the Asokan period (c 273 237 B C) gains in magnificence as for the first time stone was employed instead of wood The great art of the Asokan period is mainly repre sented by the monolithic pillars on which edicts were engraved The famous capital of the Sarnath pillar consists of four addorsed lions which originally supported the Wheel of Law resting on the abacus bearing in relief an ele phant a horse a bull and a lion (Fig 6) In other extant exam ples the crowning member con sisted of a bull or wheel The

pillars were highly polished. There are also excavated halls of the Asokan period in the Barabar hills Of the latter the Sudama cave consists of a circular chamber and an ante-chamber with side entrances. The remains of Asoka s palace at Pataliputra show that it was planned on the model of pillared halls of the Achaemenid kings of Persepolis

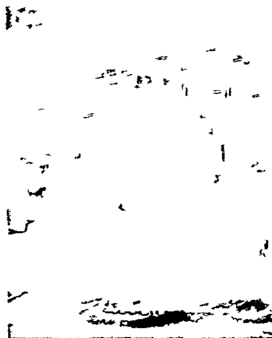
Indian architecture between 200 B C and 20 A.D continued to maintain the progress made in the Asokan period. The improvement in the cave architecture may be seen in the old Vihara at Bhaja near Poona datable to 2nd century B C (Fig 7) It is remarkable for its unique reliefs one of them being identified by Dr Coomaraswamy as Indra riding his Airavata. Bedsa and other caves near Poona of the same period consist of a nave apse and aisle the apse containing a solid stupa and the aisle continuing round the apse thus providing the circumambulation path.

The Chaitya hall at Karle which may be dated to the 1st century B C is a magnificent example of cave architecture (Fig 8) Its horseshoe windows great pillars and finely carved reliefs win our admiration.

The remains of the railings and gateways of the Bharhut stupa may be dated back to c 150 B C The railing pillars and the gateways are decorated with the figures of the guardian Yakshas and Yakshis Nagarajas birth stories of the Buddha called Jatakas floral, animal and other motifs (Fig 9) The Buddha himself does not appear and the chief events in his life are represented by symbols

There was a special type of temple connected with the Bodhi tree at Gaya On the strength of certain reliefs ranging from the 2nd century B C to the 2nd century A.D it could be said that this temple was made of a gallery with vaulted roof and Chaitya windows

*Cave Temple at Bhaja*





8
*Facade of the Chaitya Hall Karle*

of the usual type supported by pillars and with the ground plan like a Maltese cross

The Sanchi stupas are different in date The core of the stupa No 1 was probably built in the Mauryan age The stupas Nos 2 and 3 are of Sungan or gin and the gateways of Nos 1 and 3 belong to the Satavahana period (72 25 B C) The reliefs on No 2 are related to the Bharhut style but there are some reliefs which exhibit greater knowledge of spatial relation which is attributed to the hypothetical influence of Bactrian Hellenistic art but its more natural explanation would be the stylistic advance of Indian art

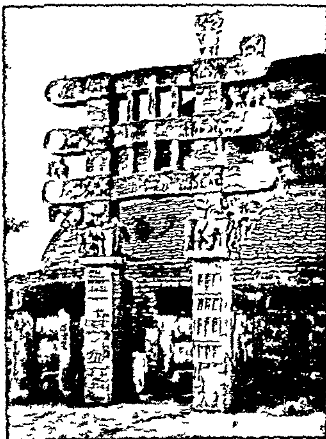
The reliefs of the Great Gateway (Figs 10 & 11) are marvels of decorative story telling The principal themes are drawn from the life of the Buddha and from the Jatakas The bigger compositions were attempted on torana architraves



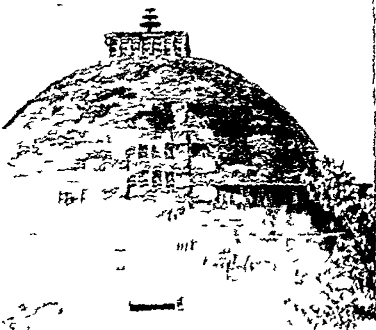
9
*Railing from Bharhut*

The excavations at Taxila and elsewhere have provided us with the materials relating to the development of architecture between 78 and 302 A.D The architectural style in the monasteries is fundamentally Indian but numerous motifs for instance the Corinthian capital pediments entablatures mouldings etc. are of debased classical order A typical Gandharan monastery consists mainly of two structures the stupa and the monastery with the aggregate of other buildings

Among the great monuments of the Deccan during this period may be mentioned the Great Stupa at Amaravati which, though originally built in the 2nd century B C was provided with sculptured casing slabs and railings in the 1st 2nd and 3rd centuries A.D On the drum of the stupa were four projecting offsets facing each of the entrances and each displaying five

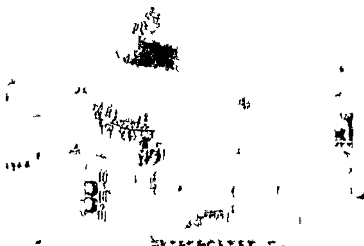


10
*Gateway Sanchi*



11
*The Great Stupa, Sanchi*

12
*Chaitya slab showing in miniature the tupa at Amaravati*



13
*The Dhamekh Stupa Sarnath*



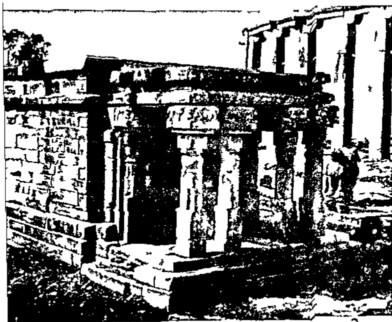
pillars called Aryaka Khambhas The stupa was surrounded by a rail (Fig 12) The subject-matter of decoration are rosettes garland carrying erotes Jataka stories walled and moated cities palace buildings toranas stupas etc The technical proficiency of the Amaravati reliefs makes them the most fascinating and expressive of the *rasa* of Indian sculpture

There is little doubt that Indian architecture and sculpture attained their zenith in the Gupta period (320-650 A D) and are best represented in temple architecture of which a few examples are given here

Attention may be drawn to the famous Dhamekh stupa at Sarnath near Banaras datable to the 6th century A D which is characterised by exquisitely carved ornaments geometrical and floral (Fig 13) The Ajanta monolithic Caves Nos XVI XVII and XIX are distinguished for the beauty of their pillars and their facade decorations The Chaitya windows with their double row of cornices in Cave No XIX at once attract our attention (Fig 14) A good example of the aspidal temples of the Gupta period is the one at Ter Among flat roofed shrines a prominent place must be given to the flat roofed temples at Sanchi (Fig 15) and Bhumara The Siva temple at Bhumara consists of a flat roof and decorated windows It was provided with a variety of richly carved sculptures The famous Mahabodhi temple at Bodh Gaya



14
*Facade of Cave XIX Ajanta*



15
*A flat roofed Gupta temple Sanchi*

in spite of its restoration probably maintains its form of the early Gupta period It consists of a high straight edged pyramidal tower of nine storeys (Fig 16)

Examples of Indian palace architecture in the Gupta period have not survived On the strength of contemporary paintings however it could be said that the Gupta palace consisted of one or two storeys and was provided with pillared halls with a flat or pointed roof decorated with paintings and reliefs It was also provided with a concert hall and a picture gallery

After the Guptas in the early mediaeval times (650 900 A D) substantial contribution was made to Indian architecture by the Chalukyas Rashtrakutas and Pallavas in the Deccan and the Palas in Northern India The famous



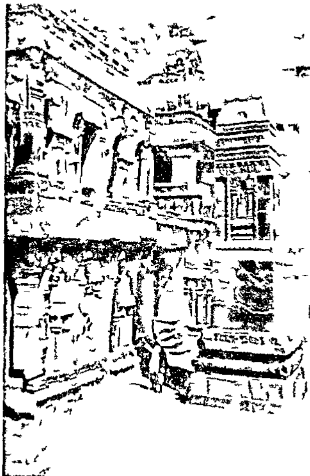
16 *The temple at Bodh Gaya*

17 *The University of Nalanda*



Buddhist University of Nalanda was at its zenith in the 7th century A D This University was surrounded by brick walls and a gate opened into the great hall of the college from which the other halls stood apart There was an observatory used for planetary observations The outer courts contained priests chambers in four stages each stage separated by carved and ornamented pillars (Fig 17)

Examples of the early Chalukyan architecture datable between 550 and 746 A D may be studied from the famous temples at Aihole Pattadakal and Badami The great Virupaksha temple of Siva (c 740 A D ) at Pattadakal (Fig 18) was built by one Gunda who received



19
*View of the southern side of Kailasa Temple Ellora*

18
*The great Virupaksha Temple Pattadakal*



20
*Elephanta Cave*



21
*View of the Rathas at Mahabalipuram*

the title of the Master Architect in the Three Worlds The Vaish nava cave temple at Badami is dis tinguished for its admirable reliefs and the pillars of the verandah are decorated with magnificent carv ings of figures

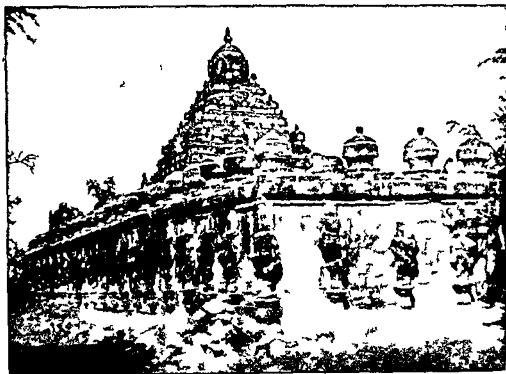
Among the famous monuments or temples raised by the Rashtra kutas may be mentioned the great Kailasa temple built at Ellora (Fig 19) by Krishna II (757 783 A D ) It is decorated with the finest sculptural composition known in India

To the same period may be dated the Sıva shrıne of Elephanta (Fıg 20) ın the neıghbourhood of Bom bay whıch ıs not so much dıstın guıshed for ıts archıtecture as for ıts beautıful sculptures whıch ın clude the famous Trımurtı Sıva

The Pallavas were a great power ın the South and on the east coast between 400 and 750 A D A passıng reference may be made here to the five rathas at Mahabalı puram all monolıths datable to the first half of the 7th century A D (Fıg 21) The characterıstıc detaıls of thıs archıtecture ınclude a capı tal plaın or horizontally fluted brackets roll cornıce wıth Chaıtya wındow n ches and makara torana lıntels The dıvıne and human figures have been most beautıfully represented Another Pallava temple known as the Kaılasanatha temple at Kanchı datable to the 8th century A D ıs a pyramıdal tower wıth a flat pıllared mandapa ın front surrounded by contınuous serıes of cells (Fıgs 22 & 23)

The temples and monuments of the late medıaeval perıod (900 1300 A D ) of Indıan archıtecture are too numerous to be descrıbed

22 *Kailasanatha Temple Kanchi*

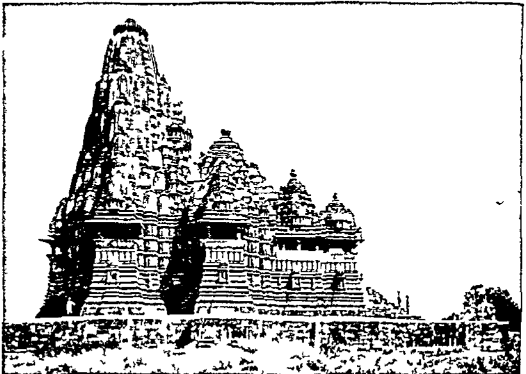


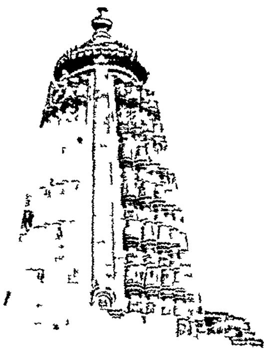
23 *Wall of courtyard Kailasanatha Temple Kanchi*

here Besides the old centres new art centres were being patronised by the Palas Chalukyas and Cholas the Gangas and Rajputs Each centre developed its own style

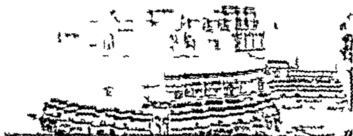
The beautiful temples at Khajuraho were erected between 950 and 1050 A D The effect of the height of the Kandarya Mahadeva Temple is enhanced by a deep basement and the reduplication of the tower Floral and human sculptures add to its beauty considerably (Fig 24)

24 *Kandarya Mahadeva Temple Khajuraho*





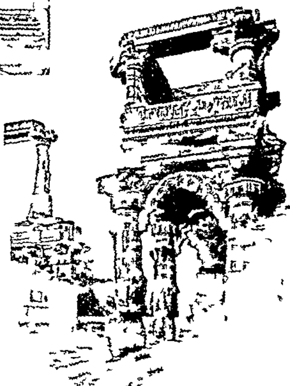
25
*Udayesvara Temple Udaipur*



26
*Rudramal Temple at Siddhpur Patan*

In Madhya Bharat the finest and the best preserved temple is that of Udayesvara at Udaipur built between 1059 and 1080 A D The sikhara is ornamented with four narrow bands running from the base to the summit (Fig 25)

Gujarat in this period also became very famous for its beautiful and richly ornamented temples The famous Rudramal temple at Siddhpur was built by Siddharaja





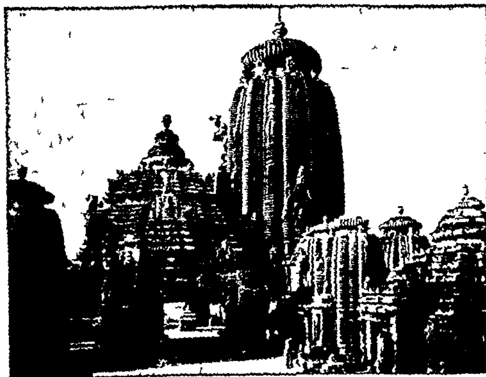
27
*Vimal Shah s Temple Mount Abu*

28
*Ceiling of the Tejpal Temple Mount Abu*

(1093 1143 A D) (Fig 26) Of the famous Jain temples at Mt Abu one built by Vimal Shah in 1032 (Fig 27) is dedicated to Adinatha and another by Vastupal and Tejpal in 1232 (Fig 28) to Neminatha The temples are made of marble As observed by Cousins the amount of beautiful ornamental detail spread over these temples in the minutely carved decoration of ceilings pillars door ways panels and niches is simply marvellous the crisp thin translucent shell like treatment of the marble surpasses anything seen elsewhere and some of the designs are veritable dreams of beauty

The Orissan temples dating from the 7th to the 13th century amply illustrate the growth of the Nagara style The Siva shrine of Parasuramesvara has a low double-roofed mandapa with solid walls lighted by openings between the roofs The great temple of Lingaraja (Fig 29) looks imposing with the effect of the height of the sikhara enhanced by the vertical lines of the strongly emphasised ribs The beautiful Surya temple at Konarak built between 1238 and

9 *Lingaraja Temple Bhuvanesvar*





30 *Surya Temple Konarak*

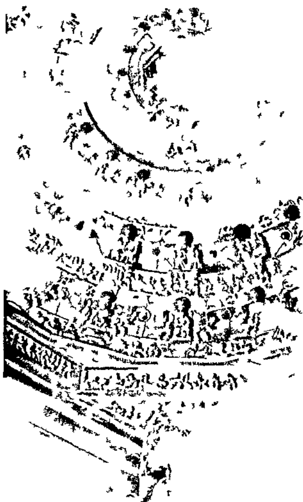
1264 A D does not differ essentially from other Orissan temples Its most remarkable feature survives in the roof of the mandapa or jagmohan which is divided into three stages (Fig 30) This and some other Orissan temples contain examples of beautiful sculpture of an erotic nature These and other decorative details have won wide appreciation

The temples of what may be termed the later Chalukyan style are widely distributed in Dharwar Mysore (Figs 31 32 & 33) and the Deccan The fully developed type has a star shaped plan with a relatively low elevation and wide extension characterised by the grouping of three shrines round a central hall pyramidal towers carrying the plan of the shrine below elaborately pierced windows and cylindrical polished pillars

In the later mediaeval period from the 15th century onwards the Hindu princes built large palaces in Rajputana and Bundelkhand The immense palace at Gwalior partly built by Man Singh (1486 1516) is famous for its wall towers and imposing gates The magnificent palace at Datia built by Bir Singh in the 17th century is the

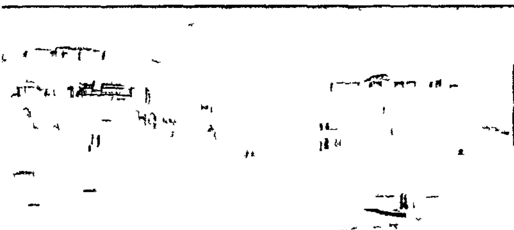
best example of Hindu architecture (Fig 34) The palace at Amber was also built in the 17th century (Fig 35) The Jodhpur Fort with its tremendous bastion and the old palace are among the be t examples of Hindu architecture extant

Reverting to the South between 650 and 1600 A D temple architecture found patronage with the Cholas Pandyas Vijayanagar kings and the Nayakas of Tanjore and Madurai The great gopurams of the Pandya period are found at Srirangam Madurai and Kumbakonam These great towers attain uch ample proportions that they dwarf the central shrine (Fig 36) The examples of the great pillared mandapa of the Vijayanagar period are found at Kanchi Vijayanagar and Vellur etc The finest of all Vijayanagar temples is the Vithoba temple finished in 1565 Its distinguished features are the pillars and mandapas and the stone car



31
*Ca d ceiling of Chenna Kesava T nple Belur*

32 *Hoysalesvara Temple Halebid*

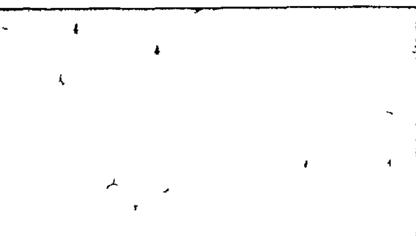




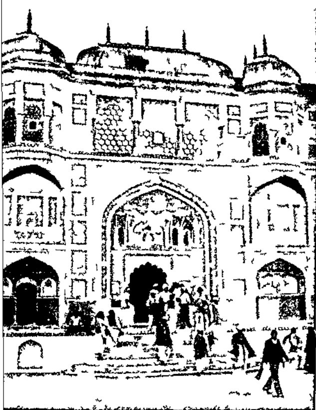


33
*Kesava Temple Somnathpur*

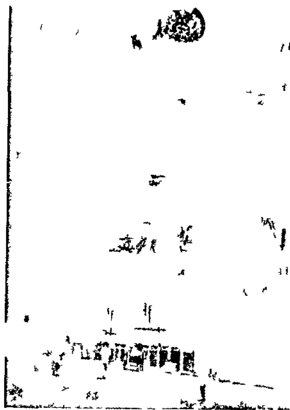
carved out of stone blocks The Nayakas of Madurai in the 17 h century were also great builders Tirumala Nayaka (1623 1659) built the Vasant Mandapa in front of the great Minakshi temple (Fig 37) It has a flat roofed corridor with three aisles



34
*B r Singh s Pole at Datia*



35 *The Palace at Amber*

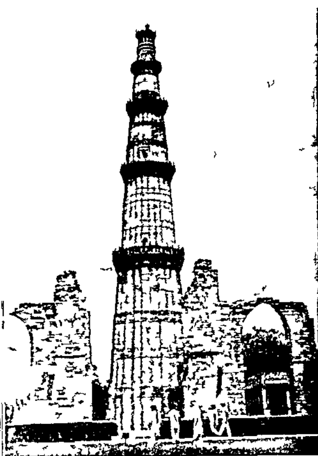


36 *Minakshi Temple Madurai*

37 *Sculptured south corr dor of M nakshi Temple Madurai*







38 *Qutb Minar Delhi*

II

The establishment of Islamic power at the end of the 12th century in Northern India brought face to face two constrasting cultures whose united genius gave birth to what we call the Islamic art of India It drew its inspiration from Syria Egypt Northern Africa and Sassanian Persia and its architecture acquired a fundamental character of its own distinguished by standardised forms and concepts It is equally true of Islamic architecture that it always developed local Muslim styles based primarily on indigenous ideals and stamped with a strong national individuality

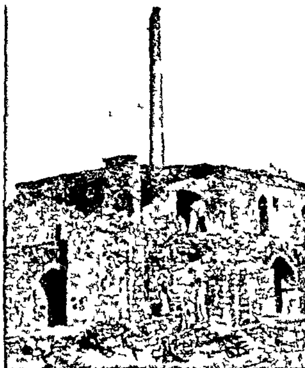
In the development of Islamic architecture in the Turkish and Afghan period (c 1200 1550 A D) Delhi occupied a prominent place as it was here that the Muhammadans first erected heir splendid mosques Qutb ud din Aibak erected his famous Jama Mosque in 1191 A D It has certain Hindu characteristics In 1230 Iltutmish doubled this mosque and Ala ud din added the third court reduplicating the prayer chamber on the north The most significant building with the mosque is the Qutb Minar (Fig 38) intended first as the tower from which the muezzin could summon the Faithful to prayer but later regarded as a Tower of Victory

From 1236 to the accession of Ala ud din in 1296 A D the history of the Sultanate architecture is blank save for the tomb of Balban (1266 86 A D) The famous monument of the Ala ud din period is Alai Darwaza built in 1311 which served as a gateway leading to the Quwaat ul Islam mosque

In the Tughluk period (1320 1413) the architecture of Delhi entered a new phase in which lavish display of ornament gave place to sobriety The city of Tughlukabad built by Ghiyas ud din (1321 25 A D) is noted for its

cyclopean walls colossal bastions and lofty narrow portals The tomb of Ghiyas ud din is in the shape of an island castle with battering walls and sturdy proportions Firuz Shah was the greatest builder in the line of the Tughluks who built cities forts palaces tombs and other buildings of public utility Besides Jaunpur he built at Delhi the palace fort of Firuzabad which was provided with 120 rest houses The chief defect of the architecture of this period however is its monotonous repetition

Of the numerous monuments



39 *Asoka Pillar at Kotla Firuz Shah Delhi*

40 *Jama Masjid Ahmedabad*



of Firuz Shah at Delhi the most noteworthy is the Kotla Firuz Shah the palace citadel which the Emperor built within his new city of Firuzabad Among the monuments within this citadel may be mentioned the Jama Masjid an imposing building of two storeys The pillar of Asoka (Fig 39) which stood in front of the mosque came from Topra in Ambala District the pillar from Meerut District was set in Kushk i Shikar palace Attention may also be drawn to the mausoleum of Khan i Jahan Tilangani the Prime Minister of Firuz *Shah who died in 1368 It is* situated a little to the south of the Dargah of Nizamuddin Aulia

There is nothing much to say about the building activity of the Sayyid and Lodi kings The distinctive features of their architecture were the use of blue enamelled tiling to give emphasis to decorative features the elaborate treatment of surface and the use of lotus finial on the domes

While Muslim architecture was developing at Delhi on the lines described above the provincial capitals had their individual architectural styles between the 13th and 15th centuries Bengal was annexed as early as 1198 99 by Muhammad Bakhtiyar Khan In that part of the country brick timber and bamboo were the principal building materials in use The Muhammadans found certain characteristic features of the architecture of Bengal such as the use of square brick pillars of stunted proportions peculiar form of curvilinear roof and carved moulded surface decoration which they adopted

We know little about the early Muslim architecture of Gaur and Pandua where the Muslim kings had raised religious monuments and buildings The far famed Adina mosque was built by Sikandar Shah (1357 89) at Pandua It is an immense open quadrangle more than twice as long as it is broad bounded on all sides by arched screens and arched ways *each identical in all respects to* others monotony is avoided by a single archway rising above the others The cloisters divided into 375 bays also follow the same pattern Another interesting monument at Pandua is the Eklakhi tomb assigned to Jalal ud din Muhammad Shah (c 1414 1431 A D) Among the interesting buildings at Gaur may be mentioned the Dakhil Darwaza built in 1459 It is a superb example of what can be achieved in brick and terracotta The Tantipara Masjid at Gaur (c 1470 A D) is supposed to be the finest monument there and this opinion is justified as far as the ornamentation is concerned

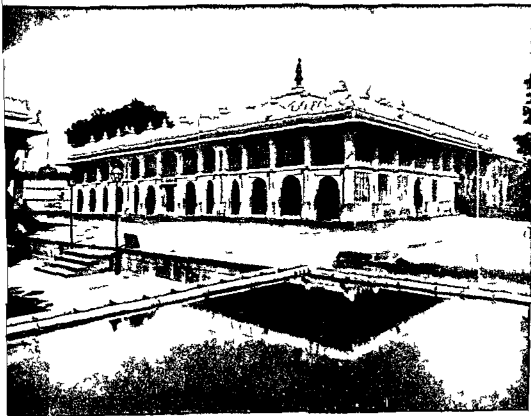
When Ala ud din Khalji invaded Gujarat he found beautiful architecture flourishing there This style was marked by breadth and spaciousness combined with elegance The foundation of the local Muslim style of Gujarat was laid

in the 14th century but it could not fully develop till the Ahmadshahi dynasty Ahmad Shah built the city of Ahmedabad and erected there such famous monuments as the Jama Masjid (Fig 40) and Tin Darwaza The latter served as the principal entrance to the outer courtyard of the palace This gateway is noted for its perfectly framed delicate archway

Among the monuments of Muhammad Shah II (1442 57 A D ) the mausoleum of Sheikh Ahmad at Sarkhej is the largest of its kind in Gujarat and is distinguished for its chaste simplicity and as a pillared hall it is difficult to improve upon (Fig 41)

The reign of Muhammad Begarha (1459 1511 A D ) is distinguished for the magnificence of its architecture He built the new cities of Juragadh Kheda and Champaner He further beautified Ahmedabad with new fortifications spacious

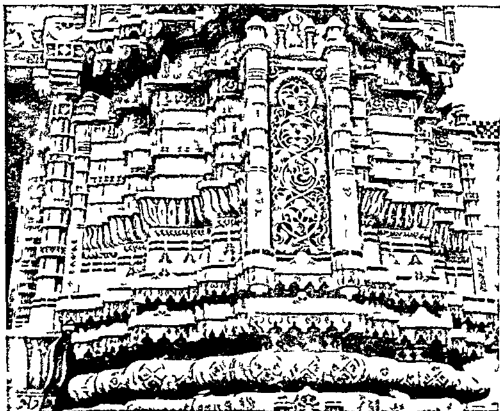
41 *Mausoleum of Sheikh Ahmad at Sarkhej Ahmedabad*

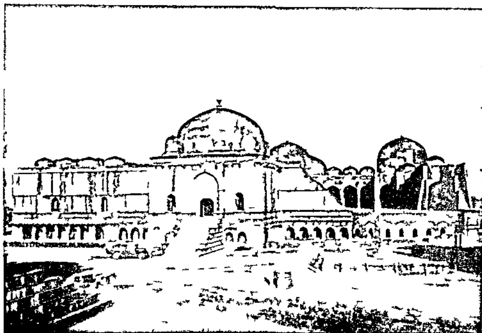


roads and splendid edifices The outstanding among the monuments at Champaner is the great Jama Masjid which rivals in beauty any mosque in Gujarat At Ahmed abad the remains of his palace at Sarkhej with its stepped ghats and terraces its pillared verandahs and bastioned windows attract our attention Attention may also be drawn to Rani Sipri s Mosque (Fig 42) which according to Fergusson is one of the most ex quisite structures in the world and is distinguished for its jewel like carvings The traceries may be seen in Sidi Sayyid Mosque to their perfection

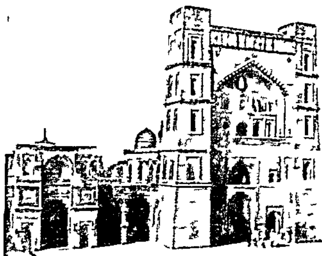
In the earlier stages of its development the local style of Dhar and Mandu was based on the architec ture of the Imperial Capital but it was also distinguished by its im pressive size and peculiarity of con struction The plan of the Hindola Mahal at Mandu is T shaped the stem of the T' forming the Darbar Hall and the cross a group of

42 *Rani Sipri s Mosque Ahmedabad*





43 *Jama Masjid Mandu*



44 *Atala Masjid Jaunpur*

smaller apartments in two storeys intended for the Zanana A fine example of Sultanate architecture is the Jama Masjid at Mandu (Fig 43)

There are some beautiful monuments at Jaunpur not far from Banaras built by the Sharqi kings The best monument in Jaunpur style is the Atala Masjid built as far back as 1378 Its architectural features are directly copied from the mosque of the Tughluk period though it is more decorated Its

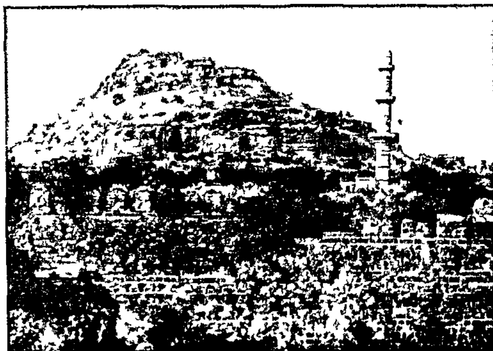
gateways were designed to match the propylons (Fig 44)

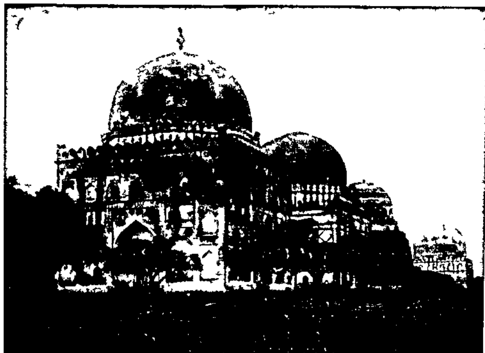
Turning from Northern India to the Deccan we find that as long as the Deccan formed part and parcel of the Delhi Empire the architecture was modelled on the Tughluk or Khalji style Even after the Deccan had re established its independence in 1347 the Bahmanis followed the Imperial style of Delhi in which European and Persian influences are evident Attention may be drawn to the fortress at Daulatabad (Fig 45) built by Mohammad Tughluk in 1339

The famous Jama Masjid (1367 A D ) at Gulbarga has two special characteristics the broad squat arches of the cloisters and the courtyard covered by small domes carried on arched bays

Among the monuments at Bidar the finest is the tomb of Ahmad Wali Shah the interior of which is decorated with paintings in floral style and enriched by bands of inscriptions painted in gold on deep blue or vermilion ground (Fig 46) Another notable monument is the College erected at Bidar in 1472 by Mahmud Gawan It was a three storeyed building containing a mosque a library lecture halls

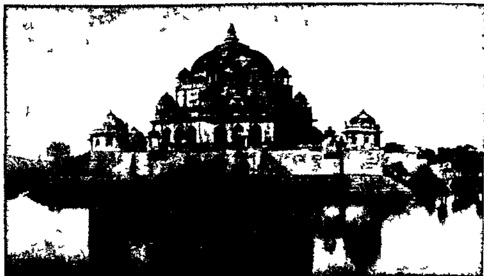
45 *Daulatabad Fort*





46 *The tomb of Ahmad Wali Shah Bidar*

47 *Mausoleum of Sher Shah Sasaram*

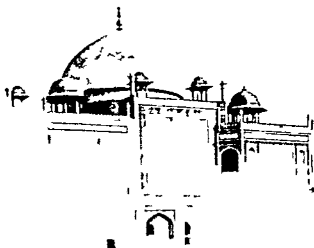


professors quarters and students cubicles looking on to an open courtyard

It is a well known fact that the Mughal period has given to Indian architecture some of its finest gems It is however notable that both Babar and Humayun were unable to contribute anything to the growth of Mughal architecture It is however significant that even in those days of storm and stress the Sayyid Afghan architecture contributed some fine monuments Attention may be drawn here to the famous mausoleum of Sher Shah at Sasaram which is an ever lasting tribute to the genius of that great ruler and the skill of its archi tect (Fig 47) The tomb rises from a large rectangular tank forming a grand pyramidal mass of diminish ing tiers crowned by a semi spheri cal dome The plinth and terrace are square in plan though the mau soleum itself is octagonal A flight of steps at entrances is provided on each side of the terrace The interior consists of a big vaulted hall Access is obtained to the mausoleum by a causeway

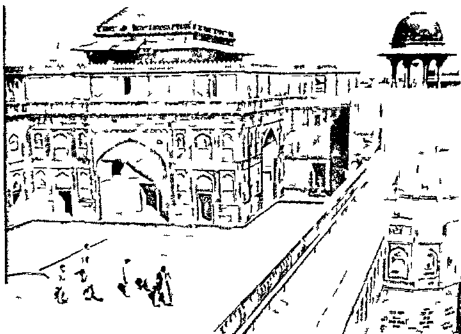
Another remarkable monument of Sher Shah s period is the Qila i Kuhna Masjid The beauty of the mosque lies chiefly in the division of its facade into five arched bays The mouldings are decorated with inlays

The accession of Akbar the Great gave a great impetus to building activity Round about 1564 Hu mayun s tomb at Delhi was built (Fig 48) One of its attractive features is its situation in a large park like enclosure Its square plan on the terrace is recessed in the middle of each side Each facade contains a doorway The great dome is mounted on a high drum The interior consists of a big hall with side chambers connected with one another by corridors and galleries



48 Humayun's tomb Delhi

49
*Jahangiri Mahal*
*Agra Fort*



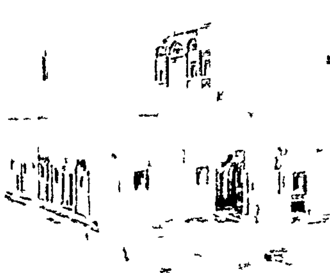
After Humayun s tomb however the most important building pro jects of Akbar s period were the palace fortresses begun by Akbar at Agra (Fig 49) and Lahore The fort at Agra is distinguished by its magnificent walls in red stone en tered by two gateways of which the Hathi Pol is beautifully design ed Among the buildings erected inside may be mentioned the Akbari Mahal and Jahangiri Mahal Both the palaces are designed on the usual plan of a central square courtyard with ranges of double storeyed rooms on each of the four sides They are distinguished for their decoration

The architecture of Fatehpur Sikri (Fig 50) 26 miles from Agra bears testimony to the genius of Akbar as a builder The enclosing wall was very substantially built and provided with nine gates One of the principal entrances is the Agra gate Within the enclosure lies Jodh Bai s palace in which Hindu influence is clearly visible Its double storeyed rooms face in ward on the quadrangle and it is provided with a handsome gateway and balconies There is a double-storeyed pavilion known as Hawa khana House of Air The decora tive elements have been copied from the architecture of Western India

Among the buildings of Fateh pur Sikri attention may also be drawn to Birbal s house (Fig 51) and Diwan i Khas (Fig 52) Bir bal s house attracts our attention on account of the exuberance of its carved decoration and the peculiar



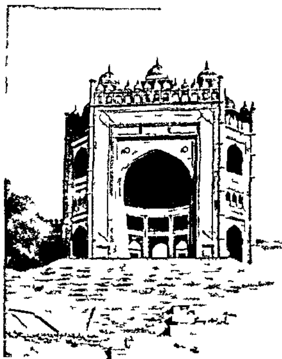
50
Akbar's Capital
Fatehpur Sikri



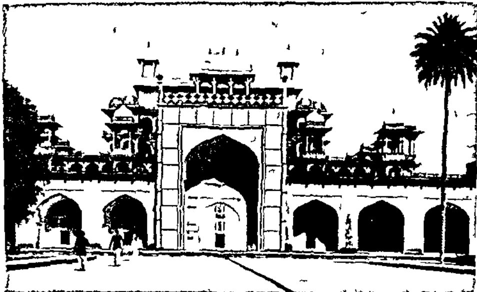
51
Birbal's House
Fatehpur Sikri

52 *Diwan i Khas Fatehpur Sikri*

construct on of its roof The interior of the D wan i Khas con sists of a lofty room divided by a gallery on brackets with other narrow hanging galleries thrown diagonally from corner to corner At the meeting point of the dia gonal galleries a circular platform ha been inserted the entire con st uc ion being supported on an immense clus er of brackets form ng the capital of a column In this wonderful hall Akbar listened to the discourse of the religious disputants from all over his em pire

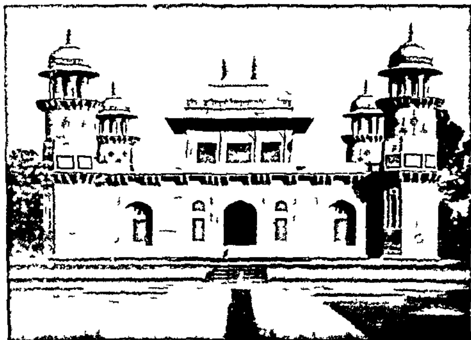


53 *Buland Darwa a Fatehpur Sikri*



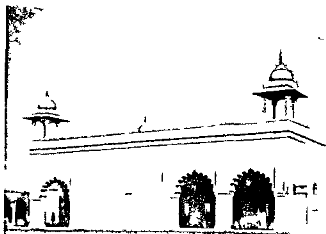
54 *Mausoleum of Akbar at Sikandra Agra*

55 *The tomb of Itmad ud daulah Agra*



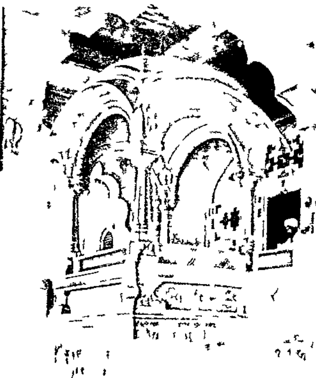
The most ımposıng buıldıng at S krı ıs the Jama Masjıd It ıs symmetrıcal ın plan the courtyard be ng entered by gateways on three sıdes The sanctuary ıs a elf contaıned place of worshıp provıded wıth a beautıful facade and a por ıco ın the centre and arcaded wıngs extendıng across each sıde Above the facade rıse three domes The finest feature of the mosque ıs however the Buland Darwaza (Fıg 53) dıstınguıshed by ıts ımposıng heıght bold pro jectıng facade whıle ıts other parts are of much smaller sıze wıth a doorway of normal proportıons

Jahangır was not a great buılder but he laıd out several beautıful gardens of whıch Shalımar Bagh near Srınagar ın Kashmır may be mentıoned Among the famous monuments of hıs perıod the tomb of Akbar at Agra ıs one (Fıg 54) The buıldıng ıs a huge structure consıstıng of five terrace dımınısh ıng as they ascend Its final storey ıs dıstınguıshed by ıts fine finısh Jahangır s tomb at Lahore ıs also an ımpressıve buıldıng The tomb of Itmad ud daulah (Fıg 55) father of Nurjahan the famous consort of Jahangır at Agra bears wıtness to the refined taste of the queen There ıs no other buıldıng lıke ıt ın the entıre range of Mughal archıtecture and ıts dıstınguıshıng feature ıs ıts chaste decoratıon The mausoleum ıs constructed ın whı e marble whıch ıs beautıfully decorated



56 *Dıwan ı Khas n the Red Fo t Delhı*

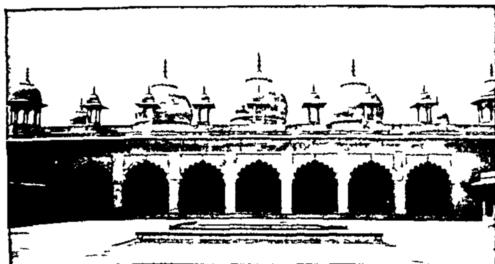
5 *The throne n D wan ı Am at Red Fo t Delhı*





58 *Marble arches in Diwan i Khas Red Fort Delhi*

59 *Moti Masjid Agra*

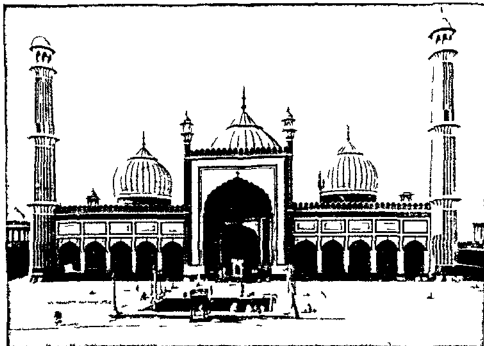


with inlay work As a matter of fact the decoration in this tomb is the harbinger of the sumptuous marble pavilions and pietra dura work of Shah Jahan

It may be said with justification that Shah Jahan found buildings in red stone and turned them into marble which was supplied in unlimited quantity by the quarries of Makrana in Rajputana The choice of a new material gave a new sensibility to the building art and decoration and greater subtlety to pietra dura Shah Jahan introduced a new feature in architecture in the shape of the cusped arch He demolished structures north of the Jehangir Mahal in Agra Fort and their place was taken by such magnificent edifices as the Diwan i Am Diwan i Khas Moti Masjid etc What could be more noble than the Hall of the Diwan i Khas with its double rows of columns The Moti Masjid (Fig 59) erected in 1654 with the flawless quality of its material and the noble disposition of its architectural elements at once attracts our attention

Not satisfied with his building activities Shah Jahan decided to build a new city at Delhi The

60 *Jama Masjid Delhi*





61 *Taj Mahal*

citadel consisted of three entrances barracks for the guards accommodation for those attached to the court darbar halls royal store rooms kitchens stables etc The royal residence is the most magnificent of all its plan being arranged in rec angles and squares All the palaces were provided with beauti ful gardens and w th separate pavilions divided into bays with massi e pillars their roofs supported by foliated arches (Fig 58) All interior surfaces are decorated either with inlay low relief carvings or pa terns in colour and gold Water was brought to the fort by a canal from the Yamuna and from there diverted into the fountains

The famous Jama Masjid at Delhi was begun in 1644 and was finished in 1658 (Fig 60) It is distinguished by its dignified and impressive appearance Its imposing

gates with an endless flight of steps and domes are nobly disposed The Jama Masjid built at Agra in the same period follows the plan of its counterpart at Delhi with its rippling succession of kiosks which give a noble aspect to this building

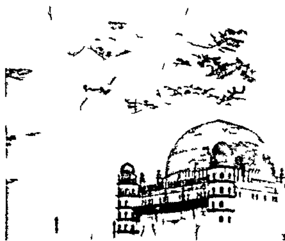
The Taj Mahal (Fig 61) has been rightly described as one of the finest monuments ever raised to honour the memory of the dead The royal consort Mumtaz Mahal during her lifetime lived in the Khas Mahal one of the noblest buildings of the time and even after her death she reposed in a memorial of matchless beauty Truly this mausoleum is an everlasting tribute to the genius of its builder and the aesthetic sense of the emperor

Not only were the carvers and decorators from all parts of India summoned but calligraphists decorators and builders from Baghdad Bukhara Shiraz and Samarkand were also invited Before the actual construction was undertaken every detail was worked out and a beautiful site was selected and the plan for the garden laid At the northern end of the enclosure is a wide terrace with the mausoleum in the centre and a mosque and another building on either side to balance the design The mausoleum rises almost abruptly from the high marble terrace The plan is square and its elevation is divided approximately into two parts of equal height Its crowning glory is the great dome Its interior has a crypt below and a vaulted tomb chamber above As regards the decoration outside the principal embellishment is obtained by arabesques in pietra dura scroll work diapers sprays of lilies and other floral forms There is little doubt that both men and nature have combined to give a thing of supreme beauty to posterity

Aurangzeb also added a few pretentious buildings but compared with their predecessors they are decidedly of inferior workmanship The mausoleum of the wife of Aurangzeb at Aurangabad is an inferior copy of the Taj Mahal

Different in character from the architecture of the Mughals a distinct architectural style prevailed at Bijapur This independent style owes its existence to the Adil Shahi dynasty of Bijapur Claiming Turkish origin the Adil Shahis introduced a new foreign

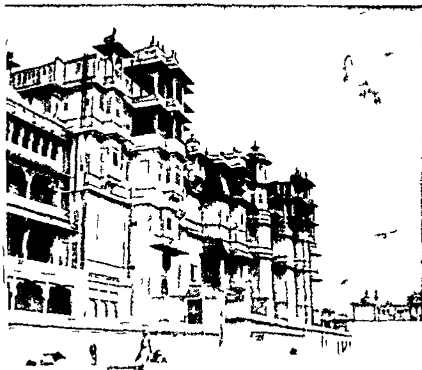
62 *Gol Gumbaz Bijapur*



element into local architecture with success The famous Gol Gumbaz (Fig 62) tomb of Muhammad Adil Shah (1627 58) is an immense mausoleum The tomb encloses a chamber of vast size and noble proportions and its most outstanding features are octagonal turrets and the ponderous bracketed cornice below the parapet The arrangement of the arches is also very ingenious The sombre beauty of the Gol Gumbaz however contrasts with Mihtar Mahal which forms a gateway to the mosque Its projecting balcony window arrests our attention

Reverting to an earlier period Ibrahim Rauza is a beautiful monument and it contains the tomb of Ibrahim Adil Shah II and a mosque Both are arcaded edifices with wide caves on carved brackets and ornamental minarets and each is surmounted with a bulbous dome Their carved decoration is clearly the outcome of the fertile imagination of the craftsmen of Bijapur

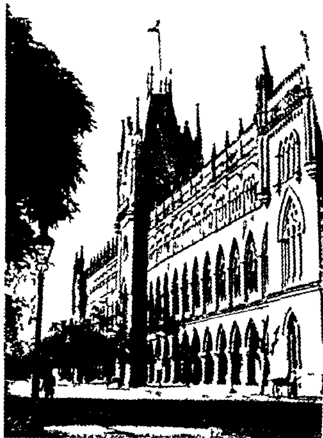
The development of Indian architecture in mediaeval India was governed by a number of factors—the existence of a rich architectural tradition patronage of ruling dynasties and security of life and prosperity in the country The rulers indeed were keenly alive to the possibilities of new architectural forms with their stress on functional and decorative elements which changed with new cultural trends (Fig 63) The richer classes such as the merchants and officials could also afford to spend their wealth on the building of temples mosques residential houses and gardens



63
*The Maharana s Palace Udaipur*

If we carefully examine the political and economic conditions of the 18th and the 19th centuries we are faced with conditions of life which were not favourable to the growth of architecture In spite of various difficulties the architectural tradition maintained itself but with the disappearance of Mughal power in Delhi the centre of building activity shifted to the provincial capitals and the princely states Henceforth it received patronage from the Rajput princes who built some beautiful palaces The famous Nawabs of Oudh built many mausoleums but architecturally they are not of much merit

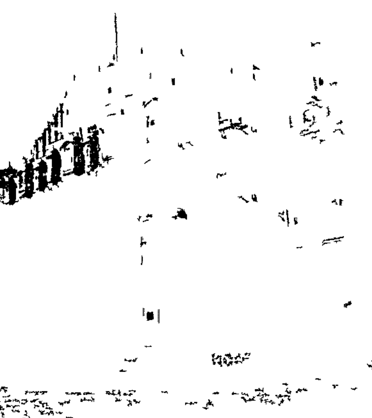
The advent of the English however brought to an end the patronage of architecture by the State It was expected as in other periods of Indian history that the impact of European architecture would result in a synthesis bringing new meaning and function to decadent architectural forms But the English were busy with other things which left them little time to preserve and enrich the artistic heritage of this country The architecture of the East India days as exemplified by the 18th and 19th century buildings in Calcutta is merely a prototype of the architectural forms then in vogue in London with a bias for ancient Classical and Gothic motifs (Fig 64) This new architecture fostered by the State although



*64 The High Court Calcutta*

foreign to the genius of the Indian people soon became popular and some of its features such as high columns pediment and tympanum were accep ed in public buildings

Indian architecture of the 18th century while preserving and fostering the Mughal tradition reflects a decadence apparent in heavy decoration confu ed planning and the use of bad material None the less even in this age of decadence Sawai Jaising laid the foundations of the carefully planned city of Jaipur in 1728



65
*Hawa Mahal, Jaipur*

Although he did not actually draw the plan for the city he consulted the plans of many European cities as well as the *Silpasastras* It is be cause of him that Jaipur is the only *planned* city of that period others being mainly a haphazard growth of houses built along narrow lanes.

The plan of the city is a rectangle adapted to the terrain The length of the rec angle is laid approxi mately on an east to west axis and is divided into four main roads running north to south Its width is divided into four main roads road running east to west The squares at the crossings of the main roads and the north to south transverse roads serve the purposes of traffic control The main streets terminate at the eight gateways in the city wall The blocks formed by the grid pattern of the streets constitute the precincts which are more or less self sufficient units These precincts are sub divided into smaller blocks by narrow streets which generally follow the grid pattern The central courtyard is a distinguishing feature of the houses In order to ensure privacy and protection against the incle mencies of the weather the windows are small Through a creen one may look down into the treet without being seen (Fig 65) The dullness of the facade with its small openings is relieved by colour

and texture Stones of many hues provide the necessary colour and stone slabs carved into lattice screens and framed into balconies supported on cantilevered balconies the texture Further variations are supplied by the use of fine plastered panels either coloured uniformly or patterned.

The builders of Jaipur were not conservative and they freely borrowed architectural motifs from Delhi Agra and even Bengal The result was a pleasing architectural design in consonance with Indian tradition and yet reflecting the genius of a scientific planner It is also worth remembering that the astronomical instruments built by Jaisingh for the observatories at Delhi (Fig 66) Jaipur Banaras and Ujjain are besides serving a purely scientific purpose noted for their beauty Built purely for a functional purpose without decoration these structures prove the beauty inherent in abstract sculpture and provide an example of how abstract structures built to a suitable scale and in a proper setting can create a beautiful and inspiring spectacle The example set by the architects of Jaipur was however shortlived as the later additions to the city show Between the middle of the 18th and the 19th centuries the Ghats of Banaras were built and they offer a unique sight for visitors (No 67)

The 19th century buildings of Delhi Agra Lucknow Banaras and other places reveal a hybrid tendency in which indigenous traditions are curiously mixed with foreign ones This was due to the indiscriminate adoption of certain architectural features from contemporary European buildings by artisans who had little knowledge of the principles of architecture The result was that while old forms still lingered the new ones could hardly be called examples of modern Indian architecture

At the beginning of this century in the wake of the Swadeshi movement there arose a demand for a national style of architecture This was met by the British with an effort to orientalize the construction of some of the public buildings The Victoria Memorial Hall (Fig 68) in Calcutta has only certain superficial Indian features and

66
*Jantar Mantar New Delhi*



the General Post Office and the Prince of Wales Museum in Bombay are the prototypes of Gol Gumbuz in Bijapur Many of the colleges schools and hospitals were planned and executed in the so called Indian style No attempt was however made to study the problems involved in starting a school of modern architecture in India The engineers and architects had at their disposal only hastily prepared architectural designs of columns arches windows doors brackets etc which were labelled Indian and used indiscriminately When such a costly project as the construction of the Banaras Hindu University was undertaken nobody cared for its architectural effectiveness A curious mixture of mediaeval temple columns spires and the late trellis work of Jaipur was labelled Indian

In this period of enthusiasm nobody raised a voice against this sham classicism which could never recapture the spirit of bygone days The problem before the architects of the early years of this century and even today is how to modernize the traditional Indian architectural concepts to make them suit modern conditions and building materials Mere revivalism without inspiration was doomed to fail

The building of New Delhi afforded an opportunity for laying the foundations of a modern school of Indian architecture The experiment unfortunately cannot be said to have been successful The architects of New Delhi claimed to have brought about a synthesis of the various periods of Indian



67 *The Ghats of Banaras*



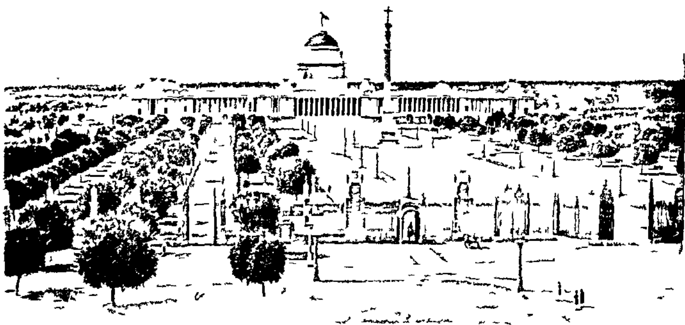
68 Victo a Memor al Calcutta

architecture (Fig 69) But pro fession is one thing and practice another This has resulted in a heavy architecture where simpli city has been sacrificed on the altar of the grandoise It may have satisfied the vanity of the rulers but does not do ju tice to the artistic heritage of this country

We have already pointed out that the architectural tradition of India is fast disappearing and that no new school has emerged so far Now the question is what should *be the choice of the architects and* the public with regard to the form and design of modern Indian archi tecture This is obviously one for the architect and the people to answer

There is no doubt that modern Indian architecture should be an expression of the *national spirit* for in all periods of Indian history architecture has reflected the spiritual and material attain ments of the people But the old values are no longer valid We are living in an age of sweeping changes The country is being rapidly industrialized and there is *a craving for scientific progress* The signs of these rapid changes are evident everywhere Architec ture no longer depends on the handicrafts for its building mate rials *for these are being replaced* by steel frames and cement and concrete

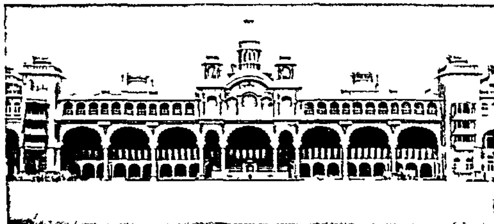
Meanwhile, the social fabric



*69 Rashtrapati Bhavan New Delhi*

economic life and spiritual values have been undermined

Based on handicrafts Indian architecture flourished for more than four thousand years and assimilated foreign influences in its own way It had however to give way to western architecture which came with the British This end was perhaps inevitable only the British hastened the process of disintegration But it must be admitted that this disruption created in course of time a demand for a national style of architecture One school of thought thus insists on the continuity of tradition and considering the architectural herit-age of the country they may be right But unfortunately this point of view as we have said be fore has led to meaningless imita tions of old forms in wholly new materials This has resulted in an unprogressive architecture as no copy howsoever great can vie with the original it is bound to be a caricature The second school of thought relies on the modern art movement and takes it for granted that it has come to stay in this country Though modern archi tecture may not satisfy all the conditions for a modern school of Indian architecture there is no question of breaking away from it



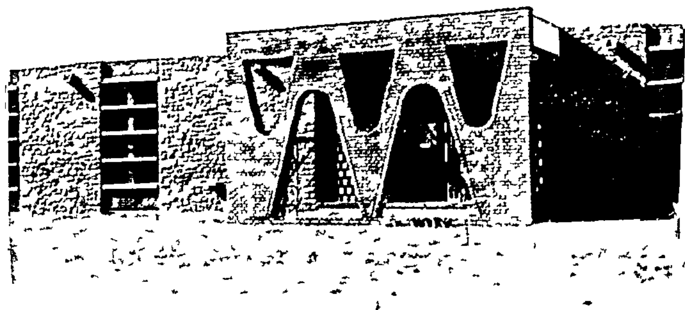
70 *The Palace Mysore*

71 *Eros Theatre Bombay*

A modern Indian architect how ever must bear in mind that there are certain elements in ancient architecture which can be adopted for contemporary use Free columns screens walls indepen dent of columns flat roofs etc are some features which can be used to great effect even today He can also make effective use of simple rural styles Intricate decorative patterns and figure sculptures can not hope to find a place in modern Indian architecture as the materials used are hardly suitable

The acceptance of the above principles would help in laying the foundations of a simple honest and straightforward style reflect ing the life and achievement of the people Owing to its limitations however it will not be able to achieve the grandiose effect of mediaeval architecture which was so closely associated with the pomp and glamour of the aristocracy of the day The planning and con struction of Chandigarh the capital of the Punjab by Le Corbusier combines utility with tradition and it is hoped that this novel experi ment will pave the way for the creation of a national school of Indian architecture

72 *A house designed by Le Corbusier Chandigarh*



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